



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

BUREAU OF ENGINEERING
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-0791

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

TO: Will Reid
Assistant Chief Engineer of Operations

FROM:  Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Requests and Justification**
City of Kingsport

- 1) Traffic Signal Controllers and Conflict Monitors**
- 2) Traffic Signal Detection**

- 1) Traffic Signal Controllers and Conflict Monitors:** The City of Kingsport is requesting that Econolite controllers and Reno Malfunction Management Units (MMU) be used in all signalization projects within their jurisdiction over the next three years where Federal and/or State funding are used. The following are justification items for these requests:

The City of Kingsport currently operates and maintains 103 signalized intersections located within their jurisdiction. Of these 103 signalized intersections, Econolite controllers are installed at 99 signalized intersections and Reno MMUs are installed at 47 signalized intersections with more installations being planned for in 2019. Due to the installation of the flashing yellow arrow operations, the City of Kingsport has started using the Reno MMUs due to their additional programming capability.

The City of Kingsport staff has been extensively trained to install, maintain, program, and troubleshoot Econolite controllers and Reno MMUs. This knowledge allows the technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system. By utilizing these three devices as the standard for the City of Kingsport, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair, as well as continuing compatibility with the traffic signal system.

- 2) **Traffic Signal Detection:** The City of Kingsport is requesting that Econolite video detection equipment be used in all signalization projects within their jurisdiction over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The City of Kingsport currently operates and maintains Econolite video detection equipment at 14 signalized intersections located within their jurisdictions. All intersections (100%) that have non-intrusive vehicle detection installed in the field are comprised of Econolite video detection equipment.

The City of Kingsport staff has been extensively trained to install, maintain, and troubleshoot Wavetronix radar detection equipment. This knowledge allows the technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system. By utilizing these devices as the standard for the City of Kingsport, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.


Assistant Chief Engineer of Operations

9/27/18
Date



TRAFFIC DIVISION

City of Kingsport, Tennessee

August 14, 2018

Steve Bryan, Traffic Engineer/Section Manager – Signal Design
Traffic Operations Division
James K. Polk Building, 18th Floor
505 Deaderick Street
Nashville, TN 37243

SUBJECT: Request for Proprietary Traffic Signal Products Certification (Traffic Signal Controllers)

Dear Mr. Bryan,

The City of Kingsport would like to request a proprietary product certification for the use of Econolite Controllers over the next (3) years where Federal and/or State funding are used on Traffic Signal projects with the City of Kingsport. There are currently 103 traffic signals located in Kingsport, with 99 of them having a version of Econolite controller. We had this request previously with TDOT, which expired earlier this year.

The above item is essential for synchronization with the existing City of Kingsport facilities. Our inventory of existing equipment is comprised of Econolite controllers. The City of Kingsport maintains an inventory of parts for Econolite equipment, as well as our Traffic Signal Technicians have undergone extensive training on the maintenance and trouble shooting for these components. Thank you for your consideration of this request to better serve the citizens of Kingsport with increased safety and efficiency through normal operations and maintenance activities. If you have any questions or concerns, please feel free to contact me at (423) 224-2426 or email at timelsea@kingsporttn.gov.

Sincerely,

Tim Elsea, PE
Traffic Engineering Manager



TRAFFIC DIVISION

City of Kingsport, Tennessee

August 14, 2018

Steve Bryan, Traffic Engineer/Section Manager – Signal Design
Traffic Operations Division
James K. Polk Building, 18th Floor
505 Deaderick Street
Nashville, TN 37243

SUBJECT: Request for Proprietary Traffic Signal Products Certification (Conflict Monitor)

Dear Mr. Bryan,

The City of Kingsport would like to request a proprietary product certification for the use of Reno MMUs over the next (3) three years where Federal and/or State funding are used on Traffic Signal projects with the City of Kingsport. There are currently 103 traffic signals located in Kingsport, with approximately fifty percent of them having a Reno MMU.

The above item is essential for synchronization with the existing City of Kingsport facilities. Kingsport has begun an operations initiative to install flashing yellow arrows on all the permissive left turns in the City. Upgrades to 47 intersections have already occurred using the Reno 1600GE. More are in the works over the next year. Our inventory of MMU equipment has shifted to Reno due to this additional programming capability. The City of Kingsport maintains an inventory of parts for Reno equipment, as well as our Traffic Signal Technicians have undergone extensive training on the maintenance and troubleshooting for these components. Thank you for your consideration of this request to better serve the citizens of Kingsport with increased safety and efficiency through normal operations and maintenance activities. If you have any questions or concerns, please feel free to contact me at (423) 224-2426 or email at timelsea@kingsporttn.gov.

Sincerely,

Tim Elsea, PE
Traffic Engineering Manager



TRAFFIC DIVISION

City of Kingsport, Tennessee

August 14, 2018

Steve Bryan, Traffic Engineer/Section Manager – Signal Design
Traffic Operations Division
James K. Polk Building, 18th Floor
505 Deaderick Street
Nashville, TN 37243

SUBJECT: Request for Proprietary Traffic Signal Products Certification (Traffic Video Detection)

Dear Mr. Bryan,

The City of Kingsport would like to request a proprietary product certification for the use of Econolite Video Detection over the next (3) three years where Federal and/or State funding are used on Traffic Signal projects with the City of Kingsport. There are currently 103 traffic signals located in Kingsport, with 10 of them having a version of Econolite Video Detection.

The above item is essential for synchronization with the existing City of Kingsport facilities. Our inventory of existing video detection equipment is comprised primarily of Econolite components. The City of Kingsport maintains an inventory of parts for Econolite equipment, as well as our Traffic Signal Technicians have undergone extensive training on the maintenance and troubleshooting for these components. Thank you for your consideration of this request to better serve the citizens of Kingsport with increased safety and efficiency through normal operations and maintenance activities. If you have any questions or concerns, please feel free to contact me at (423) 224-2426 or email at timelsea@kingsporttn.gov.

Sincerely,

Tim Elsea, PE
Traffic Engineering Manager